

THE SECRETARY GENERAL

**Federal Communications
Commission
445 12th Street SW
Washington, DC 20554**

Brussels, 24 May 2013

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Revision of Part 15 of the Commission's Rules)	ET Docket No. 13-49
to Permit Unlicensed National Information)	
Infrastructure (U-NII) Devices in the 5 GHz)	
Band)	

Dear Sirs,

The European Automobile Manufacturers' Association (ACEA) appreciate the opportunity to provide comments to the FCC's Notice of Proposed Rulemaking on Revision of Part 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz band.

The Automotive manufacturers have, for over a number of years, developed Cooperative Intelligent Transport Systems (C-ITS) in the 5.9 GHz frequency band based on frequency regulation by the FCC and the European Commission. C-ITS, in the 5.9 GHz, band has a strong focus on road safety with a view to reducing some of the 600.000 fatalities and accidents per year caused by the globally increasing road traffic density. The safety services cover both vehicle-to-vehicle (V2V) and vehicle-to-infrastructure/infrastructure-to-vehicle (V2I) communication.

The relevant frequency regulation adopted by the FCC and the European Commission is a prerequisite for deployment of Cooperative ITS (V2V and V2I). The 5.9 GHz band (5850-5925 MHz) has been designated for C-ITS in a number of countries, worldwide, and a possible global frequency allocation for ITS in the 5.9 GHz band could be considered at the next ITU World Radio Conference in 2015.

In general, harmonised spectrum encourages economies of scale in particular for global markets such as the automotive industry.

The Intelligent Transport System technology in the 5.9 GHz band has now been developed and is ready for deployment from 2015. A number of model deployments, large-scale field operational tests and demonstrations have been performed and the 5.9 GHz communication technology as well as safety services and applications will soon provide a strong benefit to end-users in high density traffic on the roads. With high penetration and an increasing number of services all seven channels within the frequency band 5850-5925 MHz will be deployed for cooperative ITS.

Spectrum availability in the 5.9 GHz band is of course particularly important for successful and reliable services, both for the initial deployment of ITS systems and also for future hard safety systems and services, such as including autonomous driving. And it is important to avoid radio interference with the safety related services in the ITS communication system by other radio systems.

We have carefully considered the FCC NPRM 13-22 and understand the intentions behind the proposal. Parts of the requested new bands U-NII-4 are seen as an important element in achieving 160 MHz channels for future innovative WIFI services.

We also take note of a request for the removal of the current limitation of U-NII to indoor use only. This would provide an opening for peer-to-peer communication services between for instance computers and smart phones.

We realise that the NTIA report about sharing between U-NII-4 and ITS provides no technical solution within the 5850-5925 MHz band. The NTIA indicates that this sharing will be difficult and that the usual mitigation techniques are not feasible for protecting mobile services. We support this statement from NTIA and would like to underline that Cooperative ITS will include hundreds of millions of vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) stations, which even if based on the same access technology have different system architectures and specific parameters compared to the U-NII devices.

The dedicated short-range communications (C-ITS) services are safety related services that are intended to reduce fatalities and accidents on the roads both in Europe and in the US. As for any other safety related communication service sufficient protection must be ensured before decision is taken on a change in frequency allocation. Furthermore mitigation of interference with safety related services will have to be based on technical measures that can be tested and validated in large scale field operational tests and not only based on advice to the end-user about operational issues.

Removal of the indoor requirement and thus allowing for Peer-to-Peer communication leading to smart-phones exchanging data within a vehicle would create unacceptable and harmful interference with the C-ITS services of the vehicle.

Global vehicle manufacturers and equipment suppliers in Europe have invested heavily in research and development of Cooperative ITS system over many years, which will soon lead to its successful deployment.

Vehicle manufacturers and global suppliers are very active on the North-American and European markets, creating jobs and innovating within the automotive industry and road infrastructure organisations. Deployment of cooperative ITS will doubtless provide strong benefit to end-users as well as traffic management organisations in the coming years. In Europe we are working closely with transport authorities and road operators in order to jointly deploy C-ITS from 2015.

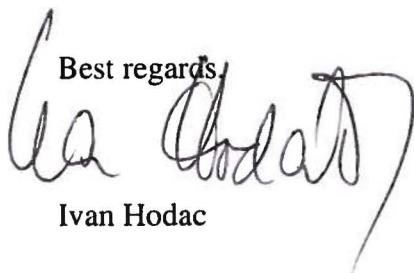
While we support general efforts towards efficient use of the radio frequency spectrum, we express our concern that compatibility between Intelligent Transport Systems in the 5.9 GHz band and wide spread Unlicensed-National Information Infrastructure (U-NII) devices will not be possible and will only further delay the process towards implementation and deployment of C-ITS in USA and Europe.

We have not seen any technical justification for the sharing of spectrum between U-NII and ITS in the 5.9 GHz band, but only an intention to create meetings to discuss the different possibilities.

In conclusion:

- We disagree with the notion that U-NII-4 should include peer-to-peer operation without management from an access point. Sharing under this condition will be particularly difficult for safety related low latency services;
- We see no technical justification that a possible sharing study will be successful from the official NTIA report nor from the WIFI contributions to these proceedings;
- We have to underline that technical solutions need to be agreed as the basis for any frequency allocation in particular when safety related services are involved;
- The time schedule for possible ITU studies is very tight as any solution for safety services needs testing and validation;
- In the frequency allocation process it is important that sharing studies are performed without predetermination by the FCC that spectrum sharing in the 5.9 GHz band should be the ultimate outcome;
- As this could very well become a global issue it is important that all stakeholders agree on the spectrum allocation solutions prior to the decision;

Best regards,



Ivan Hodac